Soil Descriptions - Non Technical

7A--Hubbard Loamy Sand, 0 To 2 Percent Slopes

Component Description

Hubbard and similar soils
- Extent: 95 percent of the unit
- Geomorphic description: Outwash plain, stream terrace
- Position on landform: Flats
- Slope range: 0 to 2 percent
- Surface layer texture: Loamy sand
- Depth to restrictive feature: Very deep (more than 60 inches)
- Drainage class: Excessively drained
- Parent material: Outwash
- Flooding: None
- Depth to wet soil moisture status: More than 6.7 feet all year
- Ponding: None
- Available water capacity to a depth of 60 inches: 4.0 inches
- Content of organic matter in the upper 10 inches: 3.0 percent
- Typical profile:
- Ap,AB--0 to 20 inches; loamy sand
- Bw--20 to 32 inches; loamy sand
- BC,C--32 to 80 inches; sand

7B--Hubbard Loamy Sand, 2 To 6 Percent Slopes

Component Description

Hubbard and similar soils
- Extent: 90 percent of the unit
- Geomorphic description: Hill on outwash plain, hilll on stream terrace
- Position on landform: Summit, backslope, shoulder
- Slope range: 2 to 6 percent
- Surface layer texture: Loamy sand
- Depth to restrictive feature: Very deep (more than 60 inches)
- Drainage class: Excessively drained
- Parent material: Outwash
- Flooding: None
- Depth to wet soil moisture status: More than 6.7 feet all year
- Ponding: None
- Available water capacity to a depth of 60 inches: 3.9 inches
- Content of organic matter in the upper 10 inches: 3.0 percent
- Typical profile:
- Ap,A--0 to 18 inches; loamy sand
- Bw--18 to 23 inches; loamy sand
- BC,C--23 to 80 inches; sand

7C--Hubbard Loamy Sand, 6 To 12 Percent Slopes

Component Description

Hubbard and similar soils
- Extent: 80 percent of the unit
- Geomorphic description: Hill on outwash plain, hilll on stream terrace
- Position on landform: Shoulder, backslope, summit
- Slope range: 6 to 12 percent
- Surface layer texture: Loamy sand
- Depth to restrictive feature: Very deep (more than 60 inches)
- Drainage class: Excessively drained
- Parent material: Outwash
- Flooding: None
- Depth to wet soil moisture status: More than 6.7 feet all year
- Ponding: None

Available water capacity to a depth of 60 inches: 3.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,AB--0 to 12 inches; loamy sand
Bw--12 to 33 inches; coarse sand
C--33 to 80 inches; coarse sand

8B--Sparta Loamy Sand, 1 To 6 Percent Slopes

Component Description

Sparta and similar soils
Extent: 95 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Backslope, shoulder, summit
Slope range: 1 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A--0 to 16 inches; loamy sand
Bw--16 to 29 inches; loamy sand
C--29 to 60 inches; sand

35--Blue Earth Mucky Silty Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Blue earth, depressional and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Mucky silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Coprogenous earth over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 17.5 percent
Typical profile:
Ap--0 to 10 inches; mucky silty clay loam
Cg--10 to 68 inches; mucky silty clay loam
2Cg--68 to 80 inches; loam

74B--Dickinson Fine Sandy Laom, 1 To 6 Percent Slopes

Component Description

Dickinson and similar soils
Extent: 95 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Summit, backslope
Slope range: 1 to 6 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A1,A2--0 to 18 inches; fine sandy loam
Bw1,Bw2--18 to 30 inches; fine sandy loam
BC--30 to 36 inches; loamy sand
C--36 to 60 inches; sand

86--Canisteo Clay Loam, Moderately Fine Substratum, 0 To 2 Percent Slopes

Component Description

Canisteo, mod fine substratum and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and rims of depressions
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 18 inches; clay loam
Bkg--18 to 39 inches; loam
Cg--39 to 80 inches; loam

Additional Components

Cordova: 15 percent of the unit

106C2--Lester Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils
Extent: 70 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Additional Components

Angus: 15 percent of the unit

106D2--Lester Loam, 12 To 18 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils

Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, shoulder
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

106E--Lester Loam, 18 To 25 Percent Slopes

Component Description

Lester and similar soils
Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 18 to 25 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
A--0 to 5 inches; loam
BE,Bt--5 to 34 inches; clay loam
Bk--34 to 60 inches; loam
C--60 to 80 inches; loam

109--Cordova Clay Loam, 0 To 2 Percent Slopes

Component Description

Cordova and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 18 inches; clay loam
Btg--18 to 38 inches; clay loam
Cg--38 to 80 inches; loam

114--Glencoe Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Glencoe, depressional and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
Ap--0 to 10 inches; clay loam
A,ABg--10 to 35 inches; clay loam
Bg--35 to 48 inches; loam
Cg--48 to 60 inches; loam

138--Lerdal Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Lerdal and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 1 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Glaciofluvial sediments and reworked till over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.1 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap--0 to 7 inches; silty clay loam
E--7 to 9 inches; silty clay loam
Bt,Btg,Bw--9 to 47 inches; silty clay loam
Bk--47 to 60 inches; clay loam

158A--Zimmerman Fine Sand, 0 To 3 Percent Slopes

Component Description

Zimmerman and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain
Position on landform: Flats and slight rises
Slope range: 0 to 3 percent
Surface layer texture: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Ap--0 to 7 inches; fine sand
E,Bw,E&Bt--7 to 80 inches; fine sand

158B--Zimmerman Fine Sand, 3 To 6 Percent Slopes

Component Description

Zimmerman and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on outwash plain
Position on landform: Shoulder, backslope, summit
Slope range: 3 to 6 percent
Surface layer texture: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Ap--0 to 7 inches; fine sand
E,Bw,E&Bt--7 to 80 inches; fine sand

158C--Zimmerman Fine Sand, 6 To 12 Percent Slopes

Component Description

Zimmerman and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on outwash plain
Position on landform: Shoulder, summit, backslope
Slope range: 6 to 12 percent
Surface layer texture: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Ap--0 to 7 inches; fine sand
E,Bw,E&Bt--7 to 80 inches; fine sand

158E--Zimmerman Fine Sand, 12 To 25 Percent Slopes

Component Description

Zimmerman and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on outwash plain
Position on landform: Backslope, shoulder
Slope range: 12 to 25 percent
Surface layer texture: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 3 inches; fine sand
E,Bw,E&Bt--3 to 80 inches; fine sand

169C--Braham Loamy Fine Sand, 6 To 12 Percent Slopes

Component Description

Braham and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash over till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.1 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 8 inches; loamy fine sand
E--8 to 28 inches; loamy sand
2Bt--28 to 48 inches; clay loam
2Bk--48 to 80 inches; loam

181--Litchfield Loamy Fine Sand, 0 To 2 Percent Slopes

Component Description

Litchfield and similar soils
Extent: 95 percent of the unit
Geomorphic description: Outwash plain
Position on landform: Flats and slight rises
Slope range: 0 to 2 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 1.3 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, August
Ponding: None
Available water capacity to a depth of 60 inches: 7.2 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,A,AB--0 to 20 inches; loamy fine sand
Bw--20 to 33 inches; fine sand
BC--33 to 40 inches; very fine sandy loam
C--40 to 80 inches; loamy fine sand

229--Waldorf Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Waldorf and similar soils
Extent: 90 percent of the unit
Geomorphic description: Lake plain, moraine
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.8 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
Ap,A,AB--0 to 20 inches; silty clay loam
Bg--20 to 53 inches; silty clay

Cg--53 to 80 inches; silty clay loam

231C--Lester Fine Sandy Loam, 6 To 12 Percent Slopes

Component Description

Lester and similar soils
Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; fine sandy loam
BE,Bt--9 to 53 inches; clay loam
C--53 to 80 inches; loam

231D--Lester Fine Sandy Loam, 12 To 18 Percent Slopes

Component Description

Lester and similar soils
Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 12 to 18 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.0 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap--0 to 6 inches; fine sandy loam
Bt--6 to 34 inches; clay loam
C--34 to 80 inches; loam

235--Nessel Loam, 1 To 3 Percent Slopes

Component Description

Nessel and similar soils
Extent: 85 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 1 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:

Ap--0 to 6 inches; loam
Bt--6 to 38 inches; clay loam
C--38 to 80 inches; loam

239--Le Sueur Clay Loam, 1 To 3 Percent Slopes

Component Description

Le sueur and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 1 to 3 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): 5.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,AB--0 to 17 inches; clay loam
Bt--17 to 37 inches; clay loam
Bk--37 to 46 inches; loam
C--46 to 80 inches; loam

Additional Components

Cordova: 15 percent of the unit

247--Linder Loam, 0 To 2 Percent Slopes

Component Description

Linder and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 1.3 feet, April
Wet soil moisture status is lowest (depth, months): 3.0 feet, August
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,A--0 to 13 inches; loam
Bw--13 to 24 inches; sandy loam
2C--24 to 60 inches; stratified gravelly coarse sand to coarse sand to loamy coarse sand

255--Mayer Loam, 0 To 2 Percent Slopes

Component Description

Mayer and similar soils
Extent: 85 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Rims of depressions
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained

Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1,A2--0 to 18 inches; loam
Bg--18 to 33 inches; sandy clay loam
2C--33 to 80 inches; gravelly coarse sand

256--Mazaska Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Mazaska and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciofluvial sediments and reworked till over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.6 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 15 inches; silty clay loam
Btg--15 to 42 inches; clay
Bkg--42 to 80 inches; loam

258B--Sandberg Loamy Sand, 2 To 6 Percent Slopes

Component Description

Sandberg and similar soils
Extent: 95 percent of the unit
Geomorphic description: Hill on stream terrace
Position on landform: Backslope, summit, shoulder
Slope range: 2 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 12 inches; loamy sand
Bw--12 to 19 inches; gravelly loamy coarse sand
Bk,C--19 to 80 inches; gravelly coarse sand

258C--Sandberg Loamy Sand, 6 To 12 Percent Slopes

Component Description

Sandberg and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on stream terrace
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 12 inches; loamy sand
Bw--12 to 19 inches; gravelly loamy coarse sand
Bk,C--19 to 80 inches; gravelly coarse sand

258E--Sandberg Loamy Sand, 12 To 35 Percent Slopes

Component Description

Sandberg and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on stream terrace
Position on landform: Shoulder, backslope
Slope range: 12 to 35 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A--0 to 12 inches; loamy sand
Bw--12 to 19 inches; gravelly loamy coarse sand
Bk,C--19 to 80 inches; gravelly coarse sand

260--Duelm Loamy Sand, 0 To 2 Percent Slopes

Component Description

Duelm and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats and slight rises
Slope range: 0 to 2 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.0 feet, February August September
Ponding: None
Available water capacity to a depth of 60 inches: 4.4 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,AB--0 to 16 inches; loamy sand
Bw--16 to 30 inches; coarse sand
C--30 to 80 inches; coarse sand

261--Isan Sandy Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Isan, depressional and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Depressions

Slope range: 0 to 1 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 6.5 percent
Typical profile:
A--0 to 14 inches; sandy loam
AB,Bg--14 to 34 inches; loamy sand
Cg--34 to 80 inches; coarse sand

286B--Shorewood Silty Clay Loam, 3 To 6 Percent Slopes

Component Description

Shorewood and similar soils
Extent: 95 percent of the unit
Geomorphic description: Hill on lake plain, hilll on moraine
Position on landform: Summit, backslope
Slope range: 3 to 6 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Lacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 10.2 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; silty clay loam
Bt--17 to 39 inches; silty clay
2BCg,2Cg--39 to 60 inches; loam

294A--Rasset Sandy Loam, 0 To 2 Percent Slopes

Component Description

Rasset and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.1 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 15 inches; sandy loam
Bt--15 to 28 inches; sandy loam
2BC--28 to 36 inches; loamy sand
2C--36 to 80 inches; sand

323--Shields Silty Clay Loam, 0 To 3 Percent Slopes

Component Description

Shields and similar soils
Extent: 95 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 0 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Glaciofluvial sediments and reworked till over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.0 foot, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 8.7 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; silty clay loam
BE,Btg--8 to 41 inches; silty clay, silty clay
2Bk--41 to 80 inches; silty clay loam, silty clay loam

327A--Dickman Sandy Loam, 0 To 2 Percent Slopes

Component Description

Dickman and similar soils
Extent: 85 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 12 inches; sandy loam
Bw--12 to 19 inches; sandy loam
2Bw--19 to 33 inches; loamy sand
2C--33 to 80 inches; sand

327B--Dickman Sandy Loam, 2 To 6 Percent Slopes

Component Description

Dickman and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Backslope, summit
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 12 inches; sandy loam
Bw--12 to 19 inches; sandy loam
2Bw--19 to 33 inches; loamy sand
2C--33 to 80 inches; sand

375--Forada Loam, 0 To 2 Percent Slopes

Component Description

Forada and similar soils
Extent: 85 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.2 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
Ap,A--0 to 16 inches; loam
Bg--16 to 28 inches; loam
2Cg--28 to 60 inches; coarse sand

392--Biscay Loam, 0 To 2 Percent Slopes

Component Description

Biscay and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.5 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1,A2--0 to 20 inches; loam
Bg--20 to 28 inches; loam
2BCg--28 to 36 inches; gravelly loam
2Cg--36 to 60 inches; stratified gravelly coarse sand to loamy sand

406--Dorset Sandy Loam, 0 To 2 Percent Slopes

Component Description

Dorset and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 11 inches; sandy loam

Bt--11 to 19 inches; sandy loam
2BC--19 to 32 inches; gravelly loamy sand
2C--32 to 80 inches; gravelly coarse sand

414--Hamel Loam, 1 To 3 Percent Slopes

Component Description

Hamel and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Drainageways and swales
Slope range: 1 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,AB--0 to 24 inches; loam
Btg--24 to 46 inches; clay loam
Cg--46 to 80 inches; loam

441--Almora Loam, 0 To 2 Percent Slopes

Component Description

Almora and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap--0 to 10 inches; loam
BE--10 to 14 inches; fine sandy loam
Bt--14 to 36 inches; loam
2Bt--36 to 41 inches; loamy sand
2C--41 to 80 inches; gravelly coarse sand

461B--Koronis Loam, 2 To 6 Percent Slopes

Component Description

Koronis and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 31 inches; loam
Bk,C--31 to 80 inches; fine sandy loam

461C2--Koronis Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Koronis, eroded and similar soils
Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, shoulder
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 0.9 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 31 inches; loam
Bk,C--31 to 80 inches; fine sandy loam

461E--Koronis Loam, 18 To 40 Percent Slopes

Component Description

Koronis and similar soils
Extent: 80 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 18 to 40 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 28 inches; loam
Bk--28 to 80 inches; fine sandy loam

511--Marcellon Loam, Map<30, 0 To 3 Percent Slopes

Component Description

Marcellon, map<30 and similar soils
Extent: 85 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 0 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, August

Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,A--0 to 13 inches; loam
Bt--13 to 32 inches; loam
Bk--32 to 60 inches; sandy loam

523--Houghton Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Houghton, drained and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Op--0 to 10 inches; muck
Oa--10 to 80 inches; muck

525--Muskego Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Muskego, surface drained and similar soils
Extent: 75 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over coprogenous earth
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 19.4 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Oa1--0 to 9 inches; muck
Oa2--9 to 36 inches; muck
Lco--36 to 60 inches; coprogenous earth

539--Klossner Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Klossner, drained and similar soils
Extent: 80 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained

Parent material: Organic material over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 17.7 inches
Content of organic matter in the upper 10 inches: 50.0 percent
Typical profile:
Op,Oa--0 to 26 inches; muck
2A1--26 to 36 inches; mucky silty clay loam
2A2--36 to 48 inches; silty clay loam
2Cg--48 to 80 inches; loam

540--Seelyeville Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Seelyeville, surface drained and similar soils
Extent: 80 percent of the unit
Geomorphic description: Outwash plain, moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa1--0 to 10 inches; muck
Oa2,Oa5--10 to 80 inches; muck

543--Markey Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Markey, surface drained and similar soils
Extent: 80 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 15.8 inches
Content of organic matter in the upper 10 inches: 70.0 percent
Typical profile:
Oa--0 to 36 inches; muck
A--36 to 42 inches; loamy sand
Cg--42 to 80 inches; sand

548--Medo Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Medo, drained and similar soils
Extent: 80 percent of the unit

Geomorphic description: Stream terrace, outwash plain
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 14.3 inches
Content of organic matter in the upper 10 inches: 70.0 percent
Typical profile:
Op,Oa--0 to 27 inches; muck
2A--27 to 35 inches; mucky loam
2Bg--35 to 39 inches; sandy clay loam
2Cg--39 to 80 inches; gravelly loamy coarse sand

603--Hanlon Fine Sandy Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Hanlon, occasionally flooded and similar soils
Extent: 80 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats and slight rises
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Occasional March April May June July August
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): 3.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.2 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A1,A2--0 to 40 inches; fine sandy loam
A3--40 to 63 inches; fine sandy loam
Bw--63 to 70 inches; sandy loam
Cg--70 to 80 inches; stratified sand to loamy fine sand to fine sandy loam

611D--Hawick Gravelly Sandy Loam, 12 To 25 Percent Slopes

Component Description

Hawick and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Shoulder, backslope
Slope range: 12 to 25 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.8 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,AB--0 to 10 inches; gravelly sandy loam
C--10 to 60 inches; gravelly coarse sand

708--Rushlake Coarse Sand, 1 To 4 Percent Slopes

Component Description

Rushlake and similar soils
Extent: 85 percent of the unit
Geomorphic description: Beach
Position on landform: Flats and slight rises
Slope range: 1 to 4 percent
Surface layer texture: Coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 2.0 feet, April
Wet soil moisture status is lowest (depth, months): 4.0 feet, February August September
Ponding: None
Available water capacity to a depth of 60 inches: 3.6 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
A--0 to 9 inches; coarse sand
C--9 to 80 inches; coarse sand

740--Hamel-Glencoe, Depressional, Complex, 0 To 3 Percent Slopes

Component Description

Hamel and similar soils
Extent: 70 percent of the unit
Geomorphic description: Moraine
Position on landform: Drainageways
Slope range: 0 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,AB--0 to 24 inches; loam
Btg--24 to 46 inches; clay loam
Cg--46 to 80 inches; loam

Glencoe, depressional and similar soils
Extent: 20 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
Ap--0 to 10 inches; clay loam
A,ABg--10 to 35 inches; clay loam
Bg--35 to 48 inches; loam
Cg--48 to 60 inches; loam

768--Mosford Sandy Loam, 0 To 2 Percent Slopes

Component Description

Mosford and similar soils
Extent: 85 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 13 inches; sandy loam
Bw--13 to 16 inches; coarse sandy loam
2Bw--16 to 35 inches; coarse sand
2C--35 to 80 inches; sand

771--Elkriver Fine Sandy Loam, 0 To 2 Percent Slopes, Rarely Flooded

Component Description

Elkriver, rarely flooded and similar soils
Extent: 85 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Alluvium
Flooding does not occur (months): January February July August September October November December
Flooding is most likely (frequency, months): Rare, March April May June
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 10 inches; fine sandy loam
A1,A3--10 to 35 inches; fine sandy loam
Bw--35 to 39 inches; fine sandy loam
2C--39 to 80 inches; sand

783C2--Lester-Kilkenny Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:

Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Kilkenny and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, shoulder
Slope range: 6 to 12 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciofluvial sediments and reworked till over till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February March June July August September October November December
Ponding: None
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; clay loam
Bt--9 to 53 inches; clay loam
2BC,2C--53 to 80 inches; loam

792--Fordum Fine Sandy Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Fordum, frequently flooded and similar soils
Extent: 90 percent of the unit
Geomorphic description: Flood plain
Position on landform: Concave drainageways
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 6.6 percent
Typical profile:
A--0 to 7 inches; fine sandy loam
Cg--7 to 28 inches; sandy loam
2Cg--28 to 80 inches; sand

799--Seelyeville And Bowstring Soils, 0 To 1 Percent Slopes, Frequently Flooded

Component Description

Seelyeville, frequently flooded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, February
Ponding: None

Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa1--0 to 12 inches; muck
Oa2,Oa3--12 to 80 inches; muck

Bowstring, frequently flooded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material and alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 21.3 inches
Content of organic matter in the upper 10 inches: 65.0 percent
Typical profile:
Oa1,Oa2--0 to 38 inches; muck
Cg--38 to 47 inches; stratified fine sand to fine sandy loam
O'a1--47 to 80 inches; muck

804B--Koronis-Sunburg-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Koronis and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 8 inches; sandy loam
Bt--8 to 25 inches; sandy loam
Bk--25 to 60 inches; sandy loam

Sunburg and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder
Slope range: 4 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Apk--0 to 7 inches; sandy loam
Bk--7 to 60 inches; sandy loam

Hawick and similar soils
Extent: 15 percent of the unit
Geomorphic description: Hill on moraine

Position on landform: Summit, shoulder
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

804C2--Koronis-Sunburg-Hawick Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Koronis, eroded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap--0 to 8 inches; sandy loam
Bt--8 to 25 inches; sandy loam
Bk--25 to 60 inches; sandy loam

Sunburg and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Apk--0 to 7 inches; sandy loam
Bk--7 to 60 inches; sandy loam

Hawick and similar soils
Extent: 15 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent

Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

804D2--Koronis-Sunburg-Hawick Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Koronis, eroded and similar soils
Extent: 40 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap--0 to 8 inches; sandy loam
Bt--8 to 25 inches; sandy loam
Bk--25 to 60 inches; sandy loam

Sunburg and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Apk--0 to 7 inches; sandy loam
Bk--7 to 60 inches; sandy loam

Hawick and similar soils
Extent: 15 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

804E--Koronis-Sunburg-Hawick Complex, 18 To 40 Percent Slopes

Component Description

Koronis and similar soils

Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 18 to 40 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 1.8 percent
Typical profile:
A--0 to 5 inches; fine sandy loam
BA,Bt--5 to 21 inches; fine sandy loam
Bk--21 to 60 inches; fine sandy loam

Sunburg and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder
Slope range: 18 to 40 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.5 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
A--0 to 4 inches; fine sandy loam
Bk--4 to 60 inches; fine sandy loam

Hawick and similar soils
Extent: 15 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 18 to 40 percent
Surface layer texture: Gravelly loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.0 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A1,A2--0 to 11 inches; gravelly loamy coarse sand
Bw--11 to 16 inches; gravelly loamy coarse sand
C--16 to 60 inches; gravelly coarse sand

807D2--Koronis-Sunburg Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Koronis, eroded and similar soils
Extent: 65 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None

Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap--0 to 8 inches; sandy loam
Bt--8 to 25 inches; sandy loam
Bk--25 to 60 inches; sandy loam

Sunburg and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Apk--0 to 7 inches; sandy loam
Bk--7 to 60 inches; sandy loam

875B--Estherville-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Estherville and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Backslope, summit
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 13 inches; sandy loam
Bw1--13 to 18 inches; sandy loam
2Bw2--18 to 23 inches; loamy coarse sand
2C--23 to 60 inches; gravelly coarse sand

Hawick and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Shoulder
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

875C--Hawick-Estherville Complex, 6 To 12 Percent Slopes

Component Description

Hawick and similar soils
- **Extent: 60 percent of the unit**
- **Geomorphic description: Hill on stream terrace, hill on outwash plain**
- **Position on landform: Shoulder**
- **Slope range: 6 to 12 percent**
- **Surface layer texture: Sandy loam**
- **Depth to restrictive feature: Very deep (more than 60 inches)**
- **Drainage class: Excessively drained**
- **Parent material: Outwash**
- **Flooding: None**
- **Depth to wet soil moisture status: More than 6.7 feet all year**
- **Ponding: None**
- **Available water capacity to a depth of 60 inches: 3.2 inches**
- **Content of organic matter in the upper 10 inches: 1.9 percent**
- **Typical profile:**
- **Ap--0 to 7 inches; sandy loam**
- **Bw--7 to 11 inches; gravelly loamy coarse sand**
- **C--11 to 80 inches; gravelly coarse sand**

Estherville and similar soils
- **Extent: 25 percent of the unit**
- **Geomorphic description: Hill on outwash plain, hilll on stream terrace**
- **Position on landform: Backslope, summit**
- **Slope range: 6 to 12 percent**
- **Surface layer texture: Sandy loam**
- **Depth to restrictive feature: Very deep (more than 60 inches)**
- **Drainage class: Somewhat excessively drained**
- **Parent material: Outwash**
- **Flooding: None**
- **Depth to wet soil moisture status: More than 5.0 feet all year**
- **Ponding: None**
- **Available water capacity to a depth of 60 inches: 4.1 inches**
- **Content of organic matter in the upper 10 inches: 3.0 percent**
- **Typical profile:**
- **Ap,A--0 to 13 inches; sandy loam**
- **Bw1--13 to 18 inches; sandy loam**
- **2Bw2--18 to 23 inches; loamy coarse sand**
- **2C--23 to 60 inches; gravelly coarse sand**

896B--Kingsley-Gotham Complex, 2 To 6 Percent Slopes

Component Description

Kingsley and similar soils
- **Extent: 70 percent of the unit**
- **Geomorphic description: Hill on moraine**
- **Position on landform: Backslope, summit**
- **Slope range: 2 to 6 percent**
- **Surface layer texture: Sandy loam**
- **Depth to restrictive feature: Very deep (more than 60 inches)**
- **Drainage class: Well drained**
- **Parent material: Till**
- **Flooding: None**
- **Depth to wet soil moisture status: More than 6.7 feet all year**
- **Ponding: None**
- **Available water capacity to a depth of 60 inches: 8.4 inches**
- **Content of organic matter in the upper 10 inches: 1.9 percent**
- **Typical profile:**
- **A--0 to 6 inches; sandy loam**
- **E--6 to 18 inches; sandy loam**
- **Bt--18 to 45 inches; sandy loam**
- **C--45 to 80 inches; sandy loam**

Gotham and similar soils
- **Extent: 25 percent of the unit**
- **Geomorphic description: Hill on moraine**
- **Position on landform: Summit, shoulder**
- **Slope range: 2 to 6 percent**
- **Surface layer texture: Loamy sand**

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Glaciofluvial sediments
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bt--9 to 18 inches; loamy sand
Bw,BC--18 to 40 inches; sand
C--40 to 80 inches; sand

896C--Kingsley-Gotham Complex, 6 To 12 Percent Slopes

Component Description

Kingsley and similar soils
Extent: 70 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 6 inches; sandy loam
E--6 to 18 inches; sandy loam
Bt--18 to 45 inches; sandy loam
C--45 to 80 inches; sandy loam

Gotham and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Glaciofluvial sediments
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bt--9 to 18 inches; loamy sand
Bw,BC--18 to 40 inches; sand
C--40 to 80 inches; sand

945C2--Lester-Storden Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained

Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Storden, eroded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 7 inches; loam
Bk--7 to 55 inches; loam
C--55 to 80 inches; loam

945D2--Lester-Storden Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, shoulder
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Storden, eroded and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 7 inches; loam

Bk--7 to 55 inches; loam
C--55 to 80 inches; loam

956--Canisteo-Glencoe, Depressional, Complex, 0 To 2 Percent Slopes

Component Description

Canisteo, mod fine substratum and similar soils
Extent: 65 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and rims of depressions
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 18 inches; clay loam
Bkg--18 to 39 inches; loam
Cg--39 to 80 inches; loam

Glencoe, depressional and similar soils
Extent: 25 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
Ap--0 to 10 inches; clay loam
A,ABg--10 to 35 inches; clay loam
Bg--35 to 48 inches; loam
Cg--48 to 60 inches; loam

978--Cordova-Rolfe, Depressional, Complex, 0 To 2 Percent Slopes

Component Description

Cordova and similar soils
Extent: 60 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 18 inches; clay loam

Btg--18 to 38 inches; clay loam
Cg--38 to 80 inches; loam

Rolfe, depressional and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Glaciolacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A--0 to 12 inches; silt loam
E--12 to 20 inches; silt loam
Btg--20 to 35 inches; silty clay
2Bt--35 to 51 inches; clay loam
2Cg--51 to 60 inches; loam

1000--Arvilla Sandy Loam, Map>25, 0 To 2 Percent Slopes

Component Description

Arvilla, map>25 and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 14 inches; sandy loam
Bw--14 to 20 inches; sandy loam
2Bw,2Bk,2C--20 to 80 inches; gravelly coarse sand

1015--Udipsamments (cut And Fill Land)

Component Description

Udipsamments (cut and fill land)
Extent: 100 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Slope range: 0 to 2 percent
Parent material: Variable sandy material
Flooding: None

The Udipsamments component, comprises of nearly level areas that had minimal grading and the cut and fill material is dominatly the sandy parent material. Because of the variability of the components in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1016--Udorthents, Loamy (cut And Fill Land)

Component Description

Udorthents (cut and fill land)
Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 0 to 6 percent
Parent material: Variable loamy material
Flooding: None

The Udorthents component, consists primarily of cut or fill operations to the landscape to level and or fill areas for development. The cut and or fill material is dominatly loamy soil material. Up to 30 percent of this map unit is covered by impervious surfaces. The majority of the area has been disturbed by construction activity. Because of the variability of the component in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1023C--Lester-Malardi Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Lester and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Malardi and similar soils
Extent: 35 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 15 inches; sandy loam
2Bt--15 to 29 inches; loamy coarse sand
2C--29 to 80 inches; gravelly sand

1023D--Lester-Malardi Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Lester and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, shoulder
Slope range: 12 to 18 percent

Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap--0 to 7 inches; loam
Bt--7 to 38 inches; clay loam
Bk--38 to 60 inches; loam
C--60 to 80 inches; loam

Malardi and similar soils
Extent: 40 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; sandy loam
Bt--9 to 14 inches; sandy loam
2Bt--14 to 21 inches; gravelly loamy coarse sand
2C--21 to 80 inches; gravelly sand

1026B--Lizzie Silt Loam, Moderately Wet, 1 To 5 Percent Slopes

Component Description

Lizzie, moderately wet and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Footslope
Backslope
Slope range: 1 to 5 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,E--0 to 12 inches; silt loam
Bt--12 to 36 inches; silt loam
BC--36 to 40 inches; very fine sandy loam
C--40 to 80 inches; very fine sandy loam

1027--Udorthents, Wet Substratum (fill Land)

Component Description

Udorthents, wet substratum
Extent: 100 percent of the unit
Geomorphic description: Moraine
Stream terrace, outwash plain

Position on landform: Fill placed in depressions
Slope range: 0 to 2 percent
Parent material: Variable soil material
Flooding: None

The Udorthents, wet substratum component comprises of fill material placed in wet depressional areas to match the adjoining upland landscape. Because of the variability of the components in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1030--Pits, Gravel-Udipsamments Complex

Component Description

Pits, gravel
Extent: 80 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Moraine
Parent material: Sandy and gravelly outwash

Gravel pits are areas that have been mined for gravel or sand. This map unit is actively being mined or is an abandoned pit. Because of the variability of this component in this map unit, interpretation for specific uses are not available. Onsite investigation is needed.

Udipsamments
Extent: 20 percent of the unit
Geomorphic description: Moraine
Outwash plain, stream terrace
Parent material: Outwash

Udipsamments are areas of soil that support plant growth and are areas of the pit that have been reclaimed or abandoned. Because of the variability of this component in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1035B--Crowfork Loamy Sand, 1 To 6 Percent Slopes

Component Description

Crowfork and similar soils
Extent: 90 percent of the unit
Geomorphic description: Hill on stream terrace
Position on landform: Backslope, summit, shoulder
Slope range: 1 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap--0 to 11 inches; loamy sand
E--11 to 20 inches; loamy fine sand
E&Bt--20 to 76 inches; loamy sand
C--76 to 80 inches; sand

1035C--Crowfork Loamy Sand, 6 To 12 Percent Slopes

Component Description

Crowfork and similar soils
Extent: 90 percent of the unit

Geomorphic description: Hill on stream terrace
Position on landform: Backslope, shoulder
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap--0 to 11 inches; loamy sand
E--11 to 20 inches; loamy fine sand
E&Bt--20 to 76 inches; loamy sand
C--76 to 80 inches; sand

1035D--Crowfork Loamy Sand, 12 To 18 Percent Slopes

Component Description

Crowfork and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on stream terrace
Position on landform: Shoulder, backslope
Slope range: 12 to 18 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap--0 to 11 inches; loamy sand
E--11 to 20 inches; loamy fine sand
E&Bt--20 to 76 inches; loamy sand
C--76 to 80 inches; sand

1036B--Angus Fine Sandy Loam, 2 To 5 Percent Slopes

Component Description

Angus and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; fine sandy loam
Bt--9 to 46 inches; loam
Bk--46 to 58 inches; loam
C--58 to 80 inches; loam

1037--Eckvoll Loamy Fine Sand, Map>25, 0 To 3 Percent Slopes

Component Description

Eckvoll, map>25 and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 0 to 3 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Outwash over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February June July August September
Ponding: None
Available water capacity to a depth of 60 inches: 8.3 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; loamy fine sand
E--9 to 24 inches; fine sand
2Bt--24 to 45 inches; loam
2C--45 to 80 inches; loam

1038A--Verndale Sandy Loam, Acid Substratum, 0 To 2 Percent Slopes

Component Description

Verndale, acid substratum and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 19 inches; sandy loam
2Bw--19 to 28 inches; sand
2C--28 to 80 inches; sand

1038B--Verndale Sandy Loam, Acid Substratum, 2 To 6 Percent Slopes

Component Description

Verndale, acid substratum and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Summit, backslope
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 19 inches; sandy loam

2Bw--19 to 28 inches; sand
2C--28 to 80 inches; sand

1066B--Malardi-Hawick Complex, 1 To 6 Percent Slopes

Component Description

Malardi and similar soils
Extent: 65 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Backslope, summit
Slope range: 1 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 15 inches; sandy loam
2Bt--15 to 29 inches; loamy coarse sand
2C--29 to 80 inches; gravelly sand

Hawick and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on stream terrace, hill on outwash plain
Position on landform: Shoulder
Slope range: 3 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

1066C--Malardi-Hawick Complex, 6 To 12 Percent Slopes

Component Description

Malardi and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 15 inches; sandy loam
2Bt--15 to 29 inches; loamy coarse sand
2C--29 to 80 inches; gravelly sand

Hawick and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

1066E--Malardi-Hawick Complex, 18 To 35 Percent Slopes

Component Description

Malardi and similar soils
Extent: 55 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Summit, backslope
Slope range: 18 to 35 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 4.6 percent
Typical profile:
A--0 to 9 inches; sandy loam
Bt--9 to 14 inches; sandy loam
2Bt--14 to 21 inches; gravelly loamy coarse sand
2C--21 to 80 inches; gravelly sand

Hawick and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 18 to 35 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 7 inches; sandy loam
Bw--7 to 11 inches; gravelly loamy coarse sand
C--11 to 80 inches; gravelly coarse sand

Additional Components

Tomall: 15 percent of the unit

1072--Udorthents, Shallow (sanitary Landfill)

Component Description

Udorthents, shallow

Extent: 100 percent of the unit
Geomorphic description: Moraine

Outwash plain
Slope range: 0 to 20 percent
Parent material: Variable loamy material
Flooding: None

The Udorthents component, consists primarily of soil fill over refuse material in a sanitary landfill operation. The soil cover material is dominatly loamy soil material. Up to 30 percent of this map unit can be covered by impervious surfaces. Because of the variability of the component in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1075--Klossner And Muskego Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Klossner, ponded and similar soils
Extent: 40 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 17.4 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
Oa--0 to 26 inches; muck
2A1--26 to 33 inches; silt loam
2A2--33 to 40 inches; loam
2Cg--40 to 80 inches; loam

Muskego, ponded and similar soils
Extent: 40 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over coprogenous earth
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 19.4 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Oa1--0 to 9 inches; muck
Oa2--9 to 36 inches; muck
Lco--36 to 60 inches; coprogenous earth

1080--Klossner, Okoboji, And Glencoe Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Klossner, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 17.4 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
Oa--0 to 26 inches; muck
2A1--26 to 33 inches; silt loam
2A2--33 to 40 inches; loam
2Cg--40 to 80 inches; loam

Okoboji, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Mucky silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Alluvium or lacustrine sediments over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 14.0 percent
Typical profile:
A1--0 to 10 inches; mucky silty clay loam
A2--10 to 52 inches; silty clay loam
Bg--52 to 60 inches; silty clay loam

Glencoe, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
A--0 to 42 inches; silty clay loam
Bg--42 to 50 inches; clay loam
Cg--50 to 60 inches; loam

1087B--Angus-Malardi Complex, 2 To 6 Percent Slopes

Component Description

Angus and similar soils
Extent: 55 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April

Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 35 inches; clay loam
BC--35 to 40 inches; clay loam
C--40 to 80 inches; loam

Malardi and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 15 inches; sandy loam
2Bt--15 to 29 inches; loamy coarse sand
2C--29 to 80 inches; gravelly sand

1094B--Angus-Cordova Complex, 0 To 5 Percent Slopes

Component Description

Angus and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 35 inches; clay loam
BC--35 to 40 inches; clay loam
C--40 to 80 inches; loam

Cordova and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches

Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,AB--0 to 13 inches; loam
Btg--13 to 33 inches; clay loam
Cg--33 to 80 inches; loam

1099--Granby Loamy Fine Sand, Very Wet, 0 To 1 Percent Slopes

Component Description

Granby, very wet and similar soils
Extent: 85 percent of the unit
Geomorphic description: Beach on moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, August
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 4.9 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
A--0 to 12 inches; loamy fine sand
AC--12 to 24 inches; loamy fine sand
C--24 to 60 inches; loamy fine sand

1110--Isan Sandy Loam, 0 To 2 Percent Slopes

Component Description

Isan and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.0 feet, August September
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 6.5 percent
Typical profile:
Ap,A--0 to 18 inches; sandy loam
AB,Bg--18 to 29 inches; loamy sand
Cg--29 to 80 inches; coarse sand

1156--Cordova Loam, 0 To 2 Percent Slopes

Component Description

Cordova and similar soils
Extent: 85 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till

Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,AB--0 to 13 inches; loam
Btg--13 to 33 inches; clay loam
Cg--33 to 80 inches; loam

1161--Barry Loam, 0 To 2 Percent Slopes

Component Description

Barry and similar soils
Extent: 85 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap--0 to 11 inches; loam
Btg--11 to 33 inches; sandy clay loam
Bkg--33 to 60 inches; sandy loam

1163--Suckercreek Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Suckercreek, frequently flooded and similar soils
Extent: 85 percent of the unit
Geomorphic description: Flood plain
Position on landform: Concave drainageways
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
A--0 to 22 inches; loam
Cg--22 to 80 inches; loamy fine sand

1165--Lundlake Silty Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Lundlake, depressional and similar soils
Extent: 90 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
Ap--0 to 12 inches; silty clay loam
A1,A2,AB--12 to 36 inches; loam
2Bg--36 to 72 inches; sandy loam
2Cg--72 to 80 inches; sandy loam

1173--Muskego And Klossner Soils, 0 To 1 Percent Slopes, Frequently Flooded

Component Description

Muskego, frequently flooded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over coprogenous earth
Flooding does not occur (months): January February August September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 19.4 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Oa1--0 to 9 inches; muck
Oa2--9 to 36 inches; muck
Lco--36 to 60 inches; coprogenous earth

Klossner, frequently flooded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over till
Flooding does not occur (months): January February August September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 17.4 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
Oa--0 to 26 inches; muck
2A1--26 to 33 inches; silt loam
2A2--33 to 40 inches; loam
2Cg--40 to 80 inches; loam

1186--Forestcity-Lundlake, Depressional, Complex, 0 To 3 Percent Slopes

Component Description

Forestcity and similar soils
Extent: 75 percent of the unit
Geomorphic description: Moraine
Position on landform: Swales and drainageways
Slope range: 0 to 3 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 3.3 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.0 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A1--0 to 22 inches; fine sandy loam
A2,AB--22 to 43 inches; loam
2Btg--43 to 60 inches; sandy clay loam
2BCg--60 to 80 inches; sandy loam

Lundlake, depressional and similar soils
Extent: 20 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1--0 to 20 inches; loam
A2,A3,AB--20 to 46 inches; loam
Bg--46 to 54 inches; sandy loam
Cg--54 to 60 inches; sandy loam

1196B--Lida-Two Inlets Complex, 1 To 8 Percent Slopes

Component Description

Lida and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Hill on outwash plain
Position on landform: Backslope, summit
Slope range: 1 to 8 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 6 inches; sandy loam
E--6 to 8 inches; sandy loam
Bt--8 to 17 inches; coarse sandy loam
2Bt--17 to 25 inches; gravelly loamy coarse sand
2C--25 to 80 inches; gravelly coarse sand

Two inlets and similar soils

Extent: 30 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on moraine
Position on landform: Shoulder
Slope range: 1 to 8 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bt--9 to 19 inches; gravelly loamy sand
C--19 to 80 inches; gravelly sand

1196C--Lida-Two Inlets Complex, 8 To 15 Percent Slopes

Component Description

Lida and similar soils
Extent: 55 percent of the unit
Geomorphic description: Hill on moraine
Hill on outwash plain
Position on landform: Summit, backslope
Slope range: 8 to 15 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 6 inches; sandy loam
E--6 to 8 inches; sandy loam
Bt--8 to 17 inches; coarse sandy loam
2Bt--17 to 25 inches; gravelly loamy coarse sand
2C--25 to 80 inches; gravelly coarse sand

Two inlets and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on moraine
Position on landform: Shoulder
Slope range: 8 to 15 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bt--9 to 19 inches; gravelly loamy sand
C--19 to 80 inches; gravelly sand

1196E--Lida-Two Inlets Complex, 15 To 30 Percent Slopes

Component Description

Lida and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine

Hill on outwash plain
Position on landform: Summit, backslope
Slope range: 15 to 30 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 6 inches; sandy loam
E--6 to 8 inches; sandy loam
Bt--8 to 17 inches; coarse sandy loam
2Bt--17 to 25 inches; gravelly loamy coarse sand
2C--25 to 80 inches; gravelly coarse sand

Two inlets and similar soils
Extent: 40 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on moraine
Position on landform: Shoulder
Slope range: 15 to 30 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.3 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
A--0 to 8 inches; loamy sand
BE,Bt--8 to 20 inches; loamy sand
BC,C--20 to 80 inches; gravelly sand

1197--Suckercreek Fine Sandy Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Suckercreek, occasionally flooded and similar soils
Extent: 80 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Occasional March April May June July August
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.3 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
A--0 to 12 inches; fine sandy loam
Cg--12 to 80 inches; fine sandy loam

1199--Klossner And Lundlake Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Klossner, ponded and similar soils
Extent: 45 percent of the unit

Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 17.4 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
Oa--0 to 26 inches; muck
2A1--26 to 33 inches; silt loam
2A2--33 to 40 inches; loam
2Cg--40 to 80 inches; loam

Lundlake, ponded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Mucky loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 13.5 percent
Typical profile:
A1--0 to 8 inches; mucky loam
A2--8 to 26 inches; loam
A3,A4,Bkg--26 to 80 inches; sandy loam

1203--Muskego, Blue Earth, And Houghton Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Muskego, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over coprogenous earth
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 19.4 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Oa1--0 to 9 inches; muck
Oa2--9 to 36 inches; muck
Lco--36 to 60 inches; coprogenous earth

Blue earth, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Very poorly drained
Parent material: Coprogenous earth over till
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 17.5 percent
Typical profile:
A--0 to 50 inches; silt loam
Cg--50 to 60 inches; silt loam

Houghton, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 84.5 percent
Typical profile:
Oa--0 to 80 inches; muck

1204B--Reedslake Loam, 2 To 5 Percent Slopes

Component Description

Reedslake and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap--0 to 12 inches; loam
Bt--12 to 26 inches; clay loam
Bk--26 to 48 inches; loam
C--48 to 80 inches; loam

1207B--Reedslake-Le Sueur Complex, 1 To 5 Percent Slopes

Component Description

Reedslake and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None

Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap--0 to 12 inches; loam
Bt--12 to 26 inches; clay loam
Bk--26 to 48 inches; loam
C--48 to 80 inches; loam

Le sueur and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Toeslope
Footslope
Slope range: 1 to 4 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,AB--0 to 14 inches; loam
Bt--14 to 40 inches; clay loam
Bk--40 to 55 inches; loam
C--55 to 80 inches; loam

1213C--Cokato-Storden Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Cokato and similar soils
Extent: 65 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 23 inches; clay loam
Bk--23 to 48 inches; loam
C--48 to 80 inches; loam

Storden and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None

Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 7 inches; loam
Bk--7 to 55 inches; loam
C--55 to 80 inches; loam

1213D--Cokato-Storden Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Cokato and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 20 inches; clay loam
Bk--20 to 40 inches; loam
C--40 to 80 inches; loam

Storden and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 7 inches; loam
Bk--7 to 55 inches; loam
C--55 to 80 inches; loam

1220C--Cokato-Storden-Hawick Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Cokato and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap--0 to 8 inches; loam

Bt--8 to 23 inches; clay loam
Bk--23 to 48 inches; loam
C--48 to 80 inches; loam

Storden and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, backslope
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 7 inches; loam
Bk--7 to 55 inches; loam
C--55 to 80 inches; loam

Hawick and similar soils
Extent: 15 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 6 to 12 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.8 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,AB--0 to 10 inches; gravelly sandy loam
C--10 to 60 inches; gravelly coarse sand

1223--Sandberg-Arvilla, Map>25, Complex, 0 To 3 Percent Slopes

Component Description

Sandberg and similar soils
Extent: 60 percent of the unit
Geomorphic description: Stream terrace
Position on landform: Slight rise
Slope range: 1 to 3 percent
Surface layer texture: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 11 inches; loamy coarse sand
Bw,BC--11 to 35 inches; gravelly coarse sand
C--35 to 80 inches; gravelly coarse sand

Arvilla, map>25 and similar soils
Extent: 30 percent of the unit
Geomorphic description: Stream terrace
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 14 inches; coarse sandy loam
Bw--14 to 17 inches; coarse sandy loam
2Bw,2C--17 to 80 inches; gravelly coarse sand

1224--Hubbard-Verndale, Acid Substratum, Complex, 0 To 3 Percent Slopes

Component Description

Hubbard and similar soils
Extent: 60 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats
Slope range: 1 to 3 percent
Surface layer texture: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.5 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 11 inches; loamy coarse sand
Bw--11 to 27 inches; loamy sand
BC,C--27 to 80 inches; sand

Verndale, acid substratum and similar soils
Extent: 30 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats and slight swales
Slope range: 0 to 2 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; coarse sandy loam
Bt--10 to 16 inches; coarse sandy loam
2Bw--16 to 45 inches; coarse sand
2C--45 to 80 inches; sand

1231--Hubbard-Mosford Complex, 0 To 3 Percent Slopes

Component Description

Hubbard and similar soils
Extent: 60 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Flats and slight rises
Slope range: 1 to 3 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year

Ponding: None
Available water capacity to a depth of 60 inches: 4.0 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,AB--0 to 20 inches; loamy sand
Bw--20 to 32 inches; loamy sand
BC,C--32 to 80 inches; sand

Mosford and similar soils
Extent: 30 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats swales
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 13 inches; sandy loam
Bw--13 to 16 inches; coarse sandy loam
2Bw--16 to 35 inches; coarse sand
2C--35 to 80 inches; sand

1255--Elkriver Fine Sandy Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Elkriver, occasionally flooded and similar soils
Extent: 80 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Occasional March April May June July August
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): 4.5 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 10 inches; fine sandy loam
A1,A3--10 to 26 inches; fine sandy loam
Bw--26 to 32 inches; very fine sandy loam
2C--32 to 80 inches; sand

Additional Components

Fordum, frequently flooded: 15 percent of the unit

1256--Cantlin Loamy Fine Sand, 0 To 3 Percent Slopes

Component Description

Cantlin and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain
Position on landform: Flats and slight rises
Slope range: 0 to 3 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained

Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 3.5 feet, April May
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, August September October
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 8 inches; loamy fine sand
Bw--8 to 22 inches; loamy fine sand
BC,C--22 to 80 inches; fine sand

1257--Elkriver-Mosford Complex, 0 To 6 Percent Slopes, Rarely Flooded

Component Description

Elkriver, rarely flooded and similar soils
Extent: 55 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 3 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Alluvium
Flooding does not occur (months): January February July August September October November December
Flooding is most likely (frequency, months): Rare, March April May June
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 10 inches; fine sandy loam
A1,A3--10 to 35 inches; fine sandy loam
Bw--35 to 39 inches; fine sandy loam
2C--39 to 80 inches; sand

Mosford, rarely flooded and similar soils
Extent: 35 percent of the unit
Geomorphic description: Flood plain
Position on landform: Slight rise
Slope range: 2 to 6 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding does not occur (months): January February July August September October November December
Flooding is most likely (frequency, months): Rare, March April May June
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 4.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 11 inches; fine sandy loam
Bw--11 to 16 inches; fine sandy loam
2Bw--16 to 25 inches; fine sand
2C--25 to 80 inches; sand

1260B--Stonelake-Nebish, Moderately Wet, Complex, 2 To 6 Percent Slopes

Component Description

Stonelake and similar soils
Extent: 55 percent of the unit
Geomorphic description: Hill on moraine

Position on landform: Summit, shoulder
Slope range: 2 to 6 percent
Surface layer texture: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 8 inches; loamy coarse sand
Bt--8 to 30 inches; very gravelly loamy coarse sand
BC,C--30 to 80 inches; gravelly sand

Nebish, moderately wet and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 2 to 6 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 9.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 6 inches; fine sandy loam
E--6 to 9 inches; fine sandy loam
Bt--9 to 43 inches; clay loam
Bk--43 to 80 inches; loam

1260C--Stonelake-Nebish Complex, 6 To 12 Percent Slopes

Component Description

Stonelake and similar soils
Extent: 55 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, shoulder
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.3 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
Ap--0 to 7 inches; loamy sand
E--7 to 20 inches; loamy coarse sand
Bt--20 to 42 inches; very gravelly coarse sand
C--42 to 80 inches; very gravelly coarse sand

Nebish and similar soils
Extent: 30 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till

Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
Ap--0 to 3 inches; fine sandy loam
E--3 to 10 inches; fine sandy loam
Bt--10 to 29 inches; clay loam
Bk--29 to 80 inches; loam

1260E--Stonelake-Nebish Complex, 12 To 25 Percent Slopes

Component Description

Stonelake and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, shoulder
Slope range: 12 to 25 percent
Surface layer texture: Gravelly coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.9 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
A--0 to 5 inches; gravelly coarse sandy loam
Bw--5 to 11 inches; very gravelly coarse sand
Bt--11 to 20 inches; very gravelly coarse sand
BC,C--20 to 80 inches; very gravelly coarse sand

Nebish and similar soils
Extent: 25 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 12 to 25 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
A--0 to 5 inches; fine sandy loam
EB--5 to 9 inches; fine sandy loam
Bt--9 to 27 inches; clay loam
Bk--27 to 80 inches; loam

1288--Seelyeville And Markey Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Seelyeville, ponded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status: At the surface all year

Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa1--0 to 15 inches; muck
Oa2,Oa3--15 to 80 inches; muck

Markey, ponded and similar soils
Extent: 45 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over outwash
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 12.8 inches
Content of organic matter in the upper 10 inches: 70.0 percent
Typical profile:
Oa--0 to 27 inches; muck
A--27 to 32 inches; loamy sand
Cg--32 to 80 inches; sand

1356--Water, Miscellaneous

Component Description

Water
Extent: 100 percent of the unit

Miscellaneous water map units are not naturally occuring water areas. They are constructed and include; sewage lagoons, storm water sediment basins with a permanent pool of water, and aquaculture ponds. This map unit is not soil, no interpretations assigned.

1362B--Angus Loam, 2 To 5 Percent Slopes

Component Description

Angus and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 35 inches; clay loam
BC--35 to 40 inches; clay loam
C--40 to 80 inches; loam

1368--Southhaven Loam, 0 To 2 Percent Slopes

Component Description

Southhaven and similar soils
Extent: 90 percent of the unit
Geomorphic description: Outwash plain
Position on landform: Swales
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Colluvium over outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 3.5 feet, April May
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, August September October
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A3--0 to 48 inches; loam
Bw--48 to 62 inches; loam
2Bw--62 to 66 inches; loamy sand
2C--66 to 80 inches; sand

1377B--Dorset-Two Inlets Complex, 2 To 6 Percent Slopes

Component Description

Dorset and similar soils
Extent: 70 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder, backslope
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 11 inches; sandy loam
Bt--11 to 19 inches; sandy loam
2BC--19 to 32 inches; gravelly loamy sand
2C--32 to 80 inches; gravelly coarse sand

Two inlets and similar soils
Extent: 20 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 2 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap--0 to 9 inches; loamy sand
Bt--9 to 19 inches; gravelly loamy sand
C--19 to 80 inches; gravelly sand

1377C--Dorset-Two Inlets Complex, 6 To 12 Percent Slopes

Component Description

Dorset and similar soils
Extent: 50 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 11 inches; sandy loam
Bt--11 to 19 inches; sandy loam
2BC--19 to 32 inches; gravelly loamy sand
2C--32 to 80 inches; gravelly coarse sand

Two inlets and similar soils
Extent: 35 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap--0 to 9 inches; loamy sand
Bt--9 to 19 inches; gravelly loamy sand
C--19 to 80 inches; gravelly sand

1377D--Dorset-Two Inlets Complex, 12 To 20 Percent Slopes

Component Description

Dorset and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Backslope, summit
Slope range: 12 to 20 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.0 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; sandy loam
Bt--9 to 14 inches; sandy loam
2Bt,2BC--14 to 25 inches; gravelly loamy sand
2C--25 to 80 inches; gravelly sand

Two inlets and similar soils
Extent: 40 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 12 to 20 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap--0 to 9 inches; loamy sand
Bt--9 to 19 inches; gravelly loamy sand
C--19 to 80 inches; gravelly sand

1377E--Dorset-Two Inlets Complex, 20 To 35 Percent Slopes

Component Description

Dorset and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Summit, backslope
Slope range: 20 to 35 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 9 inches; sandy loam
Bt--9 to 14 inches; coarse sandy loam
2BC--14 to 27 inches; loamy sand
2C--27 to 80 inches; gravelly sand

Two inlets and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder
Slope range: 20 to 35 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.3 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
A--0 to 8 inches; loamy sand
BE,Bt--8 to 20 inches; loamy sand
BC,C--20 to 80 inches; gravelly sand

1378--Fordum Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Fordum, occasionally flooded and similar soils
Extent: 85 percent of the unit
Geomorphic description: Flood plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December

Flooding is most likely (frequency, months): Occasional March April May June July August
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.3 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 8.7 inches
Content of organic matter in the upper 10 inches: 5.6 percent
Typical profile:
Ap--0 to 9 inches; loam
Cg--9 to 38 inches; loam
2Cg--38 to 80 inches; stratified sand to silt loam

1379B--Dorset-Almora Complex, 1 To 4 Percent Slopes

Component Description

Dorset and similar soils
Extent: 65 percent of the unit
Geomorphic description: Hill on outwash plain, hilll on stream terrace
Position on landform: Shoulder, backslope
Slope range: 1 to 4 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; loam
Bt--9 to 21 inches; loam
2Bt--21 to 26 inches; gravelly loamy sand
2C--26 to 80 inches; gravelly sand

Almora and similar soils
Extent: 25 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats
Slope range: 1 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap--0 to 10 inches; loam
BE--10 to 14 inches; fine sandy loam
Bt--14 to 36 inches; loam
2Bt--36 to 41 inches; loamy sand
2C--41 to 80 inches; gravelly coarse sand

1380A--Bygland Silt Loam, Map>25, 0 To 2 Percent Slopes

Component Description

Bygland, map>25 and similar soils
Extent: 85 percent of the unit
Geomorphic description: Lake plain
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciolacustrine sediments

Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April May
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, July August September
Ponding: None
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bt--9 to 23 inches; silty clay
BC--23 to 27 inches; silt loam
C--27 to 80 inches; stratified silt loam to silty clay loam

1380B--Bygland Silt Loam, Map>25, 2 To 6 Percent Slopes

Component Description

Bygland, map>25 and similar soils
Extent: 70 percent of the unit
Geomorphic description: Hill on lake plain
Position on landform: Summit, shoulder, backslope
Slope range: 2 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, July August September
Ponding: None
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bt--9 to 23 inches; silty clay
BC--23 to 27 inches; silt loam
C--27 to 80 inches; stratified silt loam to silty clay loam

Additional Components

Lindaas, sandy substratum: 15 percent of the unit

1380C--Bygland Silt Loam, Map>25, 6 To 12 Percent Slopes, Eroded

Component Description

Bygland, map>25 and similar soils
Extent: 70 percent of the unit
Geomorphic description: Hill on lake plain
Position on landform: Shoulder, backslope, summit
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February March June July August September October November December
Ponding: None
Available water capacity to a depth of 60 inches: 11.1 inches
Content of organic matter in the upper 10 inches: 0.9 percent
Typical profile:
Ap--0 to 7 inches; silt loam
Bt--7 to 20 inches; silty clay
BC--20 to 26 inches; silt loam
C--26 to 80 inches; stratified silt loam to silty clay loam

Additional Components

Lindaas, sandy substratum: 15 percent of the unit

1381--Lindaas Silt Loam, Morainic, 0 To 2 Percent Slopes

Component Description

Lindaas, moranic and similar soils
Extent: 80 percent of the unit
Geomorphic description: Lake plain
Position on landform: Flats and swales
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 8.9 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,A--0 to 16 inches; silt loam
Btg--16 to 32 inches; silty clay
Cg--32 to 80 inches; silty clay loam

1383A--Shorewood Silty Clay Loam, Moderately Wet, 0 To 3 Percent Slopes

Component Description

Shorewood, moderately wet and similar soils
Extent: 95 percent of the unit
Geomorphic description: Moraine, lake plain
Position on landform: Flats
Slope range: 0 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Lacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.0 foot, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.2 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; silty clay loam
Bt--17 to 39 inches; silty clay
2BCg,2Cg--39 to 60 inches; loam

1388B--Terril Loam, Moderately Wet, 2 To 6 Percent Slopes

Component Description

Terril, moderately wet and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Footslope
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Colluvium over till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 11.4 inches

Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A1--0 to 27 inches; loam
A2,BA--27 to 40 inches; loam
Bw--40 to 63 inches; loam
C--63 to 80 inches; loam

1406--Medo, Dassel, And Biscay Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Medo, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over outwash
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 12.2 inches
Content of organic matter in the upper 10 inches: 70.0 percent
Typical profile:
Oa--0 to 20 inches; muck
2A--20 to 34 inches; loam
2AC,2Cg--34 to 60 inches; sand

Dassel, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 8.0 percent
Typical profile:
A1,A3--0 to 23 inches; fine sandy loam
Bg--23 to 31 inches; stratified loamy fine sand to fine sandy loam
2Cg--31 to 60 inches; stratified coarse sand to loamy sand

Biscay, ponded and similar soils
Extent: 30 percent of the unit
Geomorphic description: Outwash plain, stream terrace
Position on landform: Depressions
Slope range: 0 to 1 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 6.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
A1,AB--0 to 24 inches; loam
Bg--24 to 29 inches; loam
2BCg,2Cg--29 to 60 inches; stratified gravelly coarse sand to loamy sand

1408B--Angus-Kilkenny Complex, 2 To 6 Percent Slopes

Component Description

Angus and similar soils
Extent: 45 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Backslope, summit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 35 inches; clay loam
BC--35 to 40 inches; clay loam
C--40 to 80 inches; loam

Kilkenny and similar soils
Extent: 40 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Shoulder, summit
Slope range: 2 to 6 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciofluvial sediments and reworked till over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.7 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 11 inches; clay loam
Bt--11 to 35 inches; clay loam
2Bk,2C--35 to 80 inches; loam

1438B--Braham Loamy Fine Sand, Moderately Wet, 2 To 5 Percent Slopes

Component Description

Braham, moderately wet and similar soils
Extent: 85 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Outwash over till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January February June July August September
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 8 inches; loamy fine sand
E--8 to 24 inches; loamy fine sand

2Bt--24 to 42 inches; sandy clay loam
2Bk--42 to 60 inches; loam

1443--Belleville Sandy Loam, 0 To 2 Percent Slopes

Component Description

Belleville and similar soils
Extent: 85 percent of the unit
Geomorphic description: Beach on moraine
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.0 feet, August
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap--0 to 11 inches; sandy loam
Bg--11 to 27 inches; loamy sand
2Bg--27 to 48 inches; loam
2Cg--48 to 80 inches; loam

1901B--Angus-Le Sueur Complex, 1 To 5 Percent Slopes

Component Description

Angus and similar soils
Extent: 60 percent of the unit
Geomorphic description: Hill on moraine
Position on landform: Summit, backslope
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, January
February July August September
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap--0 to 8 inches; loam
Bt--8 to 35 inches; clay loam
BC--35 to 40 inches; clay loam
C--40 to 80 inches; loam

Le sueur and similar soils
Extent: 30 percent of the unit
Geomorphic description: Moraine
Position on landform: Flats and slight rises
Slope range: 1 to 4 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 6.7 feet, February
August
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 5.0 percent

Typical profile:
Ap,AB--0 to 14 inches; loam
Bt--14 to 40 inches; clay loam
Bk--40 to 55 inches; loam
C--55 to 80 inches; loam

1931--Essexville Sandy Loam, 0 To 2 Percent Slopes

Component Description

Essexville and similar soils
Extent: 75 percent of the unit
Geomorphic description: Beach on moraine
Position on landform: Flats
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.0 feet, August September
Ponding: None
Available water capacity to a depth of 60 inches: 8.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 15 inches; sandy loam
Bg--15 to 30 inches; sand
2Cg--30 to 80 inches; loam

Additional Components

Belleville: 15 percent of the unit

1942--Forada Mucky Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Forada, depressional and similar soils
Extent: 85 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Depression
Slope range: 0 to 1 percent
Surface layer texture: Mucky loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 6.2 inches
Content of organic matter in the upper 10 inches: 10.0 percent
Typical profile:
A--0 to 10 inches; mucky loam
Bg--10 to 21 inches; sandy loam
2BCg,2Cg--21 to 60 inches; gravelly coarse sand

1946--Fordum-Winterfield Complex, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Fordum, frequently flooded and similar soils
Extent: 70 percent of the unit
Geomorphic description: Flood plain
Position on landform: Concave drainageways
Slope range: 0 to 1 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Very poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April May June
Wet soil moisture status is highest (depth, months): At the surface, April May June
Wet soil moisture status is lowest (depth, months): 1.8 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 6.6 percent
Typical profile:
A--0 to 7 inches; fine sandy loam
Cg--7 to 28 inches; sandy loam
2Cg--28 to 80 inches; sand

Winterfield, frequently flooded and similar soils
Extent: 20 percent of the unit
Geomorphic description: Flood plain
Position on landform: Slight rises
Slope range: 0 to 2 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November December
Flooding is most likely (frequency, months): Frequent, March April
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): 4.5 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
A--0 to 8 inches; loamy fine sand
C1,C2--8 to 20 inches; sand
C3,C5--20 to 80 inches; sand

1975--Oylen Sandy Loam, 0 To 2 Percent Slopes

Component Description

Oylen and similar soils
Extent: 90 percent of the unit
Geomorphic description: Stream terrace, outwash plain
Position on landform: Flats and slight rises
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.0 feet, February August September
Ponding: None
Available water capacity to a depth of 60 inches: 4.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap--0 to 10 inches; sandy loam
Bt--10 to 18 inches; sandy loam
2Bw--18 to 38 inches; sand
2C--38 to 80 inches; gravelly coarse sand

W--Water

Component Description

Water
Extent: 100 percent of the unit